

**ABSTRACT****GENE FAMILY WITH TRANSFORMATION MODULATING ACTIVITY**

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pp32 is a member of a highly conserved family of differentiation-regulated nuclear proteins that is highly expressed in nearly all human prostatic adenocarcinomas of Gleason Grade  $\geq 5$ . This contrasts with the low percentage of prostate tumors that express molecular alterations in proto-oncogens or demonstrate tumor suppressor mutation or loss of heterozygosity. By analysis of specimens of human prostatic adenocarcinoma and paired adjacent normal prostate from three individual patients, the inventors have shown that normal prostate continues to express normal pp32, whereas three of three sets of RT-PCR-amplified transcripts from prostatic adenocarcinomas display multiple *cancer-associated* coding sequence changes. The cancer-associated sequence changes appear to be functionally significant. Normal pp32 exerts antineoplastic effects through suppression of transformation. In contrast, cancer-associated pp32 variants augment, rather than inhibit, transformation.

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